

# **OMGT2191 Strategic Supply Chain Management**

## **Part B: Course Overview**

**Portfolio:** Business

**School:** 630H Management

**RMIT Course Identification and Title:** OMGT2191 Strategic Supply Chain Management

**Career:** Postgraduate

**Credit Points** 12

**Course Coordinator:** Professor Shams Rahman

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### **Pre- requisite Courses and Assumed Knowledge and Capabilities:**

OMGT1021 Supply Chain Principles

### **Course Description**

Supply chains are no longer a subject for functional specialists; rather, their performance has a great impact on all stakeholders, and often creates competitive differentiation. Companies must develop appropriate strategies to maximise the value generated along their respective supply chains. This course extends the study of supply chain principles and management from the introductory study covered in OMGT1021. The focus of the course is on the development of organisational strategy in the context of supply chain management and the supply chain management performance. It explores the three critical areas of supply chain management – supply chain operations, integration and collaboration, and virtual supply chains.

### **Objectives/Learning Outcomes/Capability Development**

The specific objectives of the course include:

- Be aware of the strategic importance of the supply chain management in the current business environment.
- Understand the various elements of the strategic alignment model and apply in real world businesses
- Be aware of the challenges faced in implementing a supply chain operating strategy.
- Understand the elements of the supply chain management performance/capability continuum and the importance of each.
- Be familiar with the new initiatives such as efficient customer response (ECR) and cooperative planning, forecasting and replenishment (CPFR), which are designed to improve the collaboration between parties in the supply chain.
- Understand how supply chain designs are changing due to the impact of e-commerce.

As a result of these learning outcomes students will develop the following capabilities:

- Ability to systematically analyse business strategies in the light of the emerging supply chain frameworks
- Ability to analyse business and develop strategies using strategic alignment models
- Ability to effectively apply the alignment model and assess the strategic needs.
- Ability to effectively evaluate emerging initiatives for supply chain collaboration and their strategic implication
- Ability to manage organisational changes related to strategy implementation
- Ability to measure performance through effective application of supply chain performance models

Students will also develop capabilities in the following areas:

*Collaboration in an effective team environment*

Students' ability to effectively contribute to the success of 'real world' groups using information that will consolidate their capacity to present views and negotiate, be flexible in their thinking and understand group dynamics.

*Capacity to operate independently*

Individual research study will help develop students' ability to operate independently.

*Communication skills*

Both written and verbal communication skills will be consolidated in this elective course in both class activities and assessment tasks.

*Interpersonal Skills*

Students' ability to present, discuss and defend their opinions and views, together with effective listening will be consolidated in both a class and a team-work environment.

**Overview of Learning Activities:**

*Lecturer inputs:* A combination of lectures, readings, and exercises is employed to deliver course objectives. Where appropriate, students are encouraged to apply course content to a better understanding of their current working and professional life.

*Students' inputs as learners:* Students are expected to undertake regularly assigned reading, and careful planning and completion of assessment tasks. Students' active participation in class discussions; sharing real world experiences, and group and individual exercises are essential.

**Overview of Learning Resources:**

Students will be provided with suggested readings and other reference lists and will have access to extensive course materials on the online RMIT Learning Hub, including digitised readings, lecture notes and a detailed study program, and access to RMIT Library online.

**Overview of Assessment**

The assessment consists of group and individual assessment. Students will be required to work in groups as well as individually.

## Prescribed Text

Christopher, M., 2011 (4<sup>th</sup> Ed) Logistics & Supply Chain Management, FT Prentice Hall, ISBN 978-0-273-73112-2

The following list of readings is also supplied.

1. McGinnis, M.A., Kohn, J.W. & Spillan J.E., 2010, A Longitudinal Study of Logistics Strategy: 1990-2008, *Journal of Business Logistics*, 31,1, 217-235. The background reading for this reading is: Clinton, S.R., and Closs D.J., 1997, Logistics Strategy: Does It Exist? *Journal of Business Logistics*, 18, 1, pp. 19-44.
2. Manuj, Ila; Sahin, Funda., A model of supply chain and supply chain decision-making complexity. *International Journal of Physical Distribution & Logistics Management*, June, 2011, Vol. 41 Issue 5, p511-549.
3. Ivanov, Dmitry, An adaptive framework for aligning (re)planning decisions on supply chain strategy, design, tactics, and operations. *International Journal of Production Research*, July 2010, Vol. 48 Issue 13, p3999-4017.
4. Huang, X. -Y.; Yan, N. -N.; Qiu, R. -Z.. Dynamic models of closed-loop supply chain and robust  $H^\infty$  control strategies. *International Journal of Production Research*, May 2009, Vol. 47 Issue 9, p2279-2300.
5. Jayaram, Jayanth; Tan, Keah-Choon; Nachiappan, S. P.. Examining the interrelationships between supply chain integration scope and supply chain management efforts. *International Journal of Production Research*, Nov., 2010, Vol. 48 Issue 22, p6837-6857.
6. Melnyk, Steven A.; Lummus, Rhonda R.; Vokurka, Robert J.; Burns, Laird J.; Sandor, Joe, Mapping the future of supply chain management: a Delphi study. *International Journal of Production Research*, August, 2009, Vol. 47 Issue 16, p4629-4653
7. Wakolbinger, T.; Cruz, J. M., Supply chain disruption risk management through strategic information acquisition and sharing and risk-sharing contracts. *International Journal of Production Research*, July, 2011, Vol. 49 Issue 13, p4063-4084
8. Qi, Yanan; Boyer, Kenneth K.; Zhao, Xiande, Supply Chain Strategy, Product Characteristics, and Performance Impact: Evidence from Chinese Manufacturers. *Decision Sciences*, Nov., 2009, Vol. 40 Issue 4, p667-695
9. Gunjan Soni; Rambabu Kodali, The strategic fit between "competitive strategy" and "supply chain strategy" in Indian manufacturing industry: an empirical approach. *Measuring Business Excellence*, May, 2011, Vol. 15 Issue 2, p70-89
10. Randall, W.S., Pohlen, T.E. & Hanna, J.B., Evolving a Theory of Performance-Based Logistics Using Insights from service dominant logic, *Journal of Business Logistics*, 2010, 31, 2, pp.35-63.
11. Soni, G. and Kodali, R., 2013, A Critical Review of Supply Chain Management Frameworks: Proposed Framework, Benchmarking: An *International Journal*, 20, 2.

Students are not expected to read all of these articles but they will be very useful for your research requirements during this course. Students are expected to use the e-journal facilities of the library and obtain these references efficiently.

## Assessment Tasks

The assessment consists of individual research report, group case analysis – report and presentation. Distribution of marks in assessments and length of the assessments are given in Table 1:

**Table 1: Assessments and distribution of marks**

Assessment task	Weighting	Due date	Word length
Assignment One – Group case presentation	15%	11 October 2014	Power point slides
Assignment Two – Group Case Report	20%	11 October 2014	About 4000
Assignment Three – Individual Research Report	65%	20 October 2014	About 4000

### GENERAL POINTS ON ASSIGNMENT SUBMISSION

- You should attach the course cover sheet to each of your assignments. A copy of this sheet can be accessed either from SOM's reception or from the DLS.
- You should use the Harvard System for citation and references. Your reference section should also be formatted using the Harvard system
- Submit a hard copy of your group report at the designated lecture prior to undertaking the group oral. All individual written assignments are to be submitted on line via the assignment drop box.
- Please do not fax assignments or attach these items to email.
- Students having difficulty meeting the submission deadlines should bring this to the attention of the course coordinator at least **three days** in advance of the submission date and might negotiate a late submission date. Extensions are normally given only in cases warranting 'special consideration' according to the university's regulations.
- Students having difficulty on how to approach the assignments can discuss their plan with the course coordinator at least **a week** before the submission date.
- **Late submission** - see below.
- Students who do not complete their assessment within the schedule for the Semester will be expected to re-enrol in the course in a subsequent semester.
- All work submitted must be original and not previously submitted for assessment at RMIT or elsewhere. The School will refer instances of plagiarism to the RMIT's Student Disciplinary Committee. Students found to have plagiarized other's works will record a failure on the plagiarized assessment. Plagiarists may also face additional penalties, including exclusion from the Masters in Logistics degree. Written assignments will be screened for plagiarism using a plagiarism detection software "turnitin". Students are reminded to familiarise themselves with RMIT's Academic Integrity@RMIT available from <http://www.rmit.edu.au/academicintegrity>. Speak to the Course coordinator if you are in doubt about how to avoid plagiarism.
- Students can download Guidelines for presentation of written work and get other studying and learning support from <http://www.rmit.edu.au/bus/students#2>

## **Explanation of Assessments and what they are designed to assess:**

### **Group Work:**

#### **(a) Group Case Oral:**

For explanation of the presentation requirements see Assignment One. This assessment is designed to assess student's strategic supply chain business knowledge. Students will demonstrate understanding and application of strategic supply chain management strategies. Students will be able to demonstrate clearly, persuasively and cogently to a peer audience their knowledge of their chosen strategy.

**Learning Outcomes** involved are strategic supply chain business knowledge and oral communication skills.

Assessment Criteria and Marking Guides are provided.

**Feedback:** Marks and feedback to each individual presenter and the group as a whole will be provided immediately after presentation.

#### **(b) Group Written Report:**

For explanation of the written report requirement see Assignment Two. This assessment is designed to assess student's strategic supply chain business knowledge and demonstrate their overall understanding of team analysis of their chosen strategic supply chain goal.

**Learning Outcomes** involved are people management in that students will demonstrate a critical understanding of the effects of personnel management, commitment to team output, reliability and professional contributions. Students will incorporate ethical and social considerations in developing their team relationships to produce the written and oral presentations.

Assessment Criteria and Marking Guides are provided.

**Feedback:** This Written Report must be presented prior to oral presentation. All feedback will be sent via email to each group within **two** weeks after submission.

#### **(c) Individual Research Assignment:**

For explanation of the individual research requirement see Assignment Three. This assessment is designed to assess students individually. It assesses their writing ability, their knowledge of the subject area, their conceptual analysis abilities and presentation skills.

**Learning Outcomes** involved are scholarly enquiry and conceptual analysis, an in-depth knowledge of the relevant discipline and the capacity for critical thinking and problem solving. This assessment assesses the ability for students to engage in independent and reflective learning. It requires information literacy and research evaluation.

Assessment Criteria and Marking Guides are provided.

**Feedback:** This Individual written assignment will be marked and feedback provided via turnitin within **three** weeks from submission.

**Further Assessment Information:** More detailed information about all assessment tasks and criteria will be advised on the first day of class. All students are requested to read carefully all assessment details provided and if there are further questions they will be answered for the whole class in this first day. If any further information is required it will be put up on Blackboard as well as discussed that first day in class.

All Assignments are to be accompanied by the Assignment Cover Sheet.

Borderline determination of any student's marks will be discussed with the course co-ordinator and the lecturers concerned. The final marks will be agreed by the academics concerned. The grading of this course will be the same for all business courses at this university.

**Penalties for Late Submission:**

All assignments will be marked as if submitted on time then the mark awarded will be reduced by 10% for each day (or part of a day) it is late unless written approval for extra time has been given by the lecturer and appropriate documentation (such as medical certificates) has been given by the student.

Any assignment that is late by seven (7) days or more will not be marked and will be awarded zero marks.

**Any Variation of Assessment Tasks:**

Assessment tasks may be varied with the documented consent of seventy (70%) percent of students enrolled in the course.

# Assignment One

<b>Assessment</b>	<b>Group Case Oral Presentation</b>
<b>Topic:</b>	Case analysis
<b>Presentation</b>	20 minutes presentation and Q & A 5-7 minutes. 4 minutes per group member (Maximum 5 people)
<b>Weighting:</b>	15% (the average mark for the group presentations)
<b>Due date:</b>	11 October, 2014
<b>Style and format:</b>	Submit a copy of your Power point presentation both on USB and hard copy to lecturer prior to presenting together with your written report.

Each group will be assigned with one of the following cases. Each group will analyse their chosen strategies used in modern supply chains.

*The question is:*

Identify and analyse the main strategies used in modern supply chains relevant to:

<b>No</b>	<b>Topics</b>
1	Distribution Strategies in Supply Chains
2	Impact of Distribution Strategies
3	Inventory Strategies in Supply Chains
4	Impact of Inventory Strategies
5	Warehousing Strategies in Supply Chains
6	Impact of Warehouse Strategies
7	Strategies in Humanitarian Supply Chains
8	Strategic Influence by Dominant Players

## Presentation task:

<b>Task</b>	<b>Duration</b>
<p>The presentation has to be clear, supported with strong evidence and has to be presented in a business-friendly manner. This presentation shall cover but not limited to:</p> <ul style="list-style-type: none"> <li>• Background of the relevant theory</li> <li>• Assumptions and premises</li> <li>• A comprehensive analysis of the strategic approaches</li> <li>• Recommendations</li> <li>• Implementation considerations</li> </ul>	<p>Each member of the group is to speak for 4 minutes and 5-7 minutes question time</p>

## Process

- Form a group of five persons (TBA)
- The course coordinator will confirm your group members and your chosen topic
- Complete and submit your presentation (soft copy only via email) at least 24 hours prior to your presentation day.

### Marking Criteria and Distribution

1. **Presentation and preparation:-** evidence of preparation; use of presentation aids; responsibility sharing; interaction with audience; time management and verbal communication skills.
2. **Content :-** coverage of the issues; extent of evidence; clarity of argument; analytical approach; relevance of recommendation
3. **Discussion:-** quality of response to questions; participation and contribution in answering questions

**A copy of the marking criteria and distribution of mark is given in Appendix A**

### Important Notes

- Prepare a power point presentation
- You need to submit **a hard and soft copy of this presentation** for the whole group 24 hours prior to your presentation to the lecturer
- The hard copy will be a ppt slides of 6 per page single sided and handed to the lecturer together with a hard copy of a bound written group report PRIOR to presentation. A soft copy of both written and ppt slides are also to be available on a usb for transfer to the lecturer's usb.
- All members of the group are expected to participate in the presentation. Each student must speak for four- five minutes on their allocated part of the presentation.

## Assessment Two – Group report

Assessment	Group Report
Topic:	See above – Each group will present their written report on their chosen topic
Presentation	In about 4000 words ( <b>excluding reference and appendices</b> )
Weighting:	20%
Due date:	11 October 2014
Style and format:	Provide both hard and soft copy <b>prior</b> to oral presentation.

**A Group Written Work Guide is provided in Appendix B.**

**A marking guide for the Group Report is provided in Appendix C.**

### Group grades and Peer Evaluations:

Generally each member of a group will receive a single grade given to the group on the basis of the group's overall performance in assessment 1 and 2. There may be instances where this is not fair, however. Thus peer evaluation (a form is attached – **Appendix D**) is requested after the group work is completed and individual grades will be adjusted to reflect your group's judgement of your contribution. However, you do not have to submit the peer evaluation if you think that all members of your group have contributed (i.e., researching, organising, writing and attending group discussions) equally. Otherwise submit the peer evaluation form.



## Assessment Three – Individual Research report

Assessment	Individual Research Report
<b>Topic:</b>	How have supply chain strategies evolved over the last decade and why? How will these strategies prepare industry for future challenges?
<b>Presentation</b>	Maximum 4000 words ( <b>excluding reference and appendices</b> ) This is a research report. It does NOT require case studies or examples. It is a theoretical piece of research.
<b>Weighting:</b>	65%
<b>Due date:</b>	20 October 2014
<b>Style and format:</b>	Submit online via turnitin.

### Suggested Background Reading List:

References as a foundation for individual assignment: (Note referencing format and use this format in your research report.)

Ballou, R.H., 2007, The evolution and future of logistics and supply chain management, *European Business Review*, 19, 4, 332-348.

Geoffrion, A.M. and Powers, R.F., 1995, Twenty Years of Strategic Distribution System Design: An Evolutionary Perspective, *Interfaces*, 25, 5 September-October, 105-127.

La Londe, B.J. and Masters, J.M., 1994, Emerging Logistics Strategies: Blueprints for the Next Century, *International Journal of Physical Distribution & Logistics Management*, 24, 7, 35 – 47.

Meade, L. And Sarkis, J., 1998, Strategic analysis of logistics and supply chain management systems using the analytical network process, *Transportation Research Part E: Logistics and Transportation Review*, 34, 4, 201-215.

McGinnis, M.A., Kohn, J.W. and Spillan, J.E., 2010, A Longitudinal Study of Logistics Strategy: 1990-2008, *Journal of Business Logistics*, 31, 1, 217-235.

Olavarrieta, S. And Ellinger, A.E., 1997, Resource-based theory and strategic logistics research, *International Journal of Physical Distribution & Logistics Management*, 27, 9/10, 559-587.

Spillan, J.E., McGinnis, M.A., Kara, A. and Yi, G.L., 2013, A Comparison of the Effect of Logistic Strategy and Logistics Integration on Firm Competitiveness in the USA and China, *International Journal of Logistics Management*, 24, 2. (Note this article is so recent it does not have paper numbers at the time of including this article to your suggested background reading list).

### Assessment 3: Individual Research Report

Written report: typed, single line spaced; font 12, Arial or Times New Roman

You are required to conduct a thorough literature search (books, journals, trade magazines etc.) in order to prepare the research report. It is expected that you will follow the following guidelines while preparing your essay:

#### **Introduction** (about 1 page)

- Introduce your topic of research.
- Discuss aims and objectives of the research.

- Highlight the plan of the report.

**Literature Search/Analysis and Discussion** (about 6-7 pages)

- Conduct a thorough search on the topic of research. For this you are required to search journals (academic and trade), books, websites. Your objective is to provide up-to-date information on the topic. Use academic journal articles under a decade old in the majority of your references.
- Organise the materials in a meaningful manner. You may develop/use a conceptual framework for this. Build your arguments based on the evidences from published cases and empirical studies. Analyse your points carefully and fully. This is a research assignment – **it is not a case study**.

**Conclusions** (about 1.5 pages)

- Current status
- Future direction.

**References**

- Provide a list of references and reference these appropriately in the report.

The marking criteria used to assess your written report consists of four major items:

1. Relevance
2. Organisation
3. Research, and
4. Innovation

Please check the above items while preparing your report.

- Give figures and tables where necessary.
- Appendices can be added if additional material is considered essential.

**Individual Research Report will be assessed using the evaluation sheet presented in Appendix E.**

## Recommended background and Further Reading

This is not an exhaustive list of references. Students should also use the library catalogue and databases to locate additional resources.

### SELECTED LOGISTICS & SUPPLY CHAIN MANAGEMENT WEBSITES:

[amrresearch.com](http://amrresearch.com): Research and analysis of information technology companies, products, and industry trends. Free newsletters.

[www.businessweek.com](http://www.businessweek.com): Information about business issues and company strategy.

[www.cips.org](http://www.cips.org) : The Chartered Institute of Purchasing & Supply. Information on publications and purchasing supply resources on the web.

[www.erpworld.com](http://www.erpworld.com): [Articles about ERP](#). [Subscription to newsletter](#). [Information about ERP software providers and vendors around the world](#).

[www.fastcompany.com](http://www.fastcompany.com): Information about business issues and company strategy.

[www.gt.com](http://www.gt.com) : Grant Thornton's web page. On-line articles on supply chain management can be found in the company's Survey of American Manufacturers.

[www.gartner.com](http://www.gartner.com): Provides research papers & analysis of information technology industries.

[www.harvardbusinessonline](http://www.harvardbusinessonline): HBR articles on business issues and case studies.

[www.manufacturing.net](http://www.manufacturing.net) : Articles about supply chain management and many aspects of research operations. Free subscription to weekly newsletters and online magazines. One of the magazines is the Supply Chain Management Review.

[www.manufacturingsystems.com](http://www.manufacturingsystems.com) : Information and links related to manufacturing.

<http://mat.gsia.cmu.edu> : Michael Trick's operation research page, and links to other OR pages.

[www.mcb.co.uk/cgi-bin/journal/scm](http://www.mcb.co.uk/cgi-bin/journal/scm) : Supply Chain Management's home page. SCM is an international journal dedicated to academic & practical issues related to SC management.

[www.mitsloan.mit.edu/smr](http://www.mitsloan.mit.edu/smr): Sloan Management Review. A peer-reviewed source of management innovation; a general-management journal published at MIT.

<http://rockfordconsulting.com> : Rockford Consultant's web page. Some articles and "success stories" about supply chain management.

[www.sms.org](http://www.sms.org) : The Strategic Management Society focuses its attention on the development and dissemination of insights into business and management.

[www.supplychainbrain.com](http://www.supplychainbrain.com): "Nerve Center" for today's Supply Chain developments & innovative thinking.

[www.yankeegroup.com](http://www.yankeegroup.com): Research and consulting services, focusing on the internet, technology, and enterprise applications.

## KEY JOURNALS IN LOGISTICS AND SUPPLY CHAIN MANAGEMENT

Here are some of the top level journals:

- Journal of Operations Management (A\*)
- International Journal of Operations and Production Management (A)
- International Journal of Production Economics (A)
- Supply Chain management (A)
- Transportation: an international journal devoted to the improvement of transportation planning and practice (A)
- Transportation Research Part A: Policy and Practice (A)
- Transportation Science (A)
- Business Process Management Journal (B)
- IEEE Transactions on Intelligent Transportation Systems (B)
- International Journal of Logistics management (B)
- International Journal of Production Research (B)
- Journal of Business Logistics (B)
- Journal of Supply Chain Management: a global review of purchasing and supply (B)
- Production and Operations Management (B)
- Road and Transport Research: a journal of Australian and New Zealand research and practice (B)
- Transportation Research Part E - Logistics and Transportation Review (B)
- Asia Pacific Journal of Marketing and Logistics (C)
- International Journal of Integrated Supply Management (C)
- International Journal of Logistics Economics and Globalisation (C)
- International Journal of Logistics Research and Applications A (C)

- International Journal of Logistics Systems and Management (C)
- International Journal of Physical Distribution and Logistics Management (C)
- International Journal of Value Chain Management (C)
- Journal of Intelligent Transportation Systems: technology, planning, and operations (C)
- Journal of Purchasing and Supply Management (C)
- Research in Transportation Economics (C)

**Some useful specific journal articles are posted below:**

- McGinnis, M.A., Kohn, J.W. & Spillan J.E., 2010, A Longitudinal Study of Logistics Strategy: 1990-2008, *Journal of Business Logistics*, 31,1, 217-235. The background reading for this reading is: Clinton, S.R., and Closs D.J., 1997, *Logistics Strategy: Does It Exist?* *Journal of Business Logistics*, 18, 1, pp. 19-44.
- Manuj, Ila; Sahin, Funda., A model of supply chain and supply chain decision-making complexity. *International Journal of Physical Distribution & Logistics Management*, Jun2011, Vol. 41 Issue 5, p511-549.
- Ivanov, Dmitry, An adaptive framework for aligning (re)planning decisions on supply chain strategy, design, tactics, and operations. *International Journal of Production Research*, Jul2010, Vol. 48 Issue 13, p3999-4017.
- Huang, X. -Y.; Yan, N. -N.; Qiu, R. -Z.. Dynamic models of closed-loop supply chain and robust  $H^\infty$  control strategies. *International Journal of Production Research*, May2009, Vol. 47 Issue 9, p2279-2300.
- Jayaram, Jayanth; Tan, Keah-Choon; Nachiappan, S. P.. Examining the interrelationships between supply chain integration scope and supply chain management efforts. *International Journal of Production Research*, Nov2010, Vol. 48 Issue 22, p6837-6857.
- Melnyk, Steven A.; Lummus, Rhonda R.; Vokurka, Robert J.; Burns, Laird J.; Sandor, Joe, Mapping the future of supply chain management: a Delphi study. *International Journal of Production Research*, Aug2009, Vol. 47 Issue 16, p4629-4653
- Wakolbinger, T.; Cruz, J. M., Supply chain disruption risk management through strategic information acquisition and sharing and risk-sharing contracts. *International Journal of Production Research*, Jul2011, Vol. 49 Issue 13, p4063-4084
- Qi, Yanan; Boyer, Kenneth K.; Zhao, Xiande, Supply Chain Strategy, Product Characteristics, and Performance Impact: Evidence from Chinese Manufacturers. *Decision Sciences*, Nov2009, Vol. 40 Issue 4, p667-695
- Gunjan Soni; Rambabu Kodali, The strategic fit between "competitive strategy" and "supply chain strategy" in Indian manufacturing industry: an empirical approach. *Measuring Business Excellence*, May2011, Vol. 15 Issue 2, p70-89
- Randall, W.S., Pohlen, T.E. & Hanna, J.B., Evolving a Theory of Performance-Based Logistics Using Insights from service dominant logic, *Journal of Business Logistics*, 2010, 31, 2, pp.35-63.
- Gonzalez-Benito, J., 2010, Supply Strategy and business performance: An analysis based on the relative importance assigned to generic competitive objectives, *International Journal of Operations & Production Management*, 30, 8, 774-797.
- Oltra, M.J. & Flor, M.L., 2010, The Moderating Effect of Business Strategy on the relationship between Operations Strategy and Firms' Results, *International Journal of Operations & Production Management*, 30, 6, 612-638.
- Kuula, M., Putkiranta, A. & Toivanen, J., 2012, Coping with the change: a longitudinal study into the changing manufacturing practices, *International Journal of Operations & Production Management*, 32, 2, 106-120.

## APPENDIX A

### Marking Criteria and Distribution Oral Presentation

Course: OMGT2191 Strategic Supply Chain Management

Group Participants Names:

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Criterion	Distribution of marks	Allocated Marks	Marks
<i>Presentation &amp; preparation (35%)</i>	Evidence of preparation	5%	
	Use of presentation aids	5%	
	Communication skills	10%	
	Time management	5%	
	Interaction with audience	10%	
<i>Content (50%)</i>	Coverage of the topic	10%	
	Extent of evidence	10%	
	Verbal Clarity of argument	10%	
	Analytical approach	10%	
	Relevance and delivery of content and recommendation	10%	
<i>Discussion (15%)</i>	Quality of response	10%	
	Participation & contribution	5%	
		Total = 100%*	

\* Each student will receive an individual score for their oral presentation which will then be combined with each group member's individual score. These will be aggregated and average and each group member will be given the group's average grade out of 15%.

Overall comment \_\_\_\_\_

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## **APPENDIX B**

### **Group Written Work Guide**

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#### **The analysis of logistics and supply chain management**

Since the mid-1970s there has been significant development in the theory and practice of logistics management and as a consequence there is now a much greater degree of understanding of how supply chains operate and how they might be improved.

Although each supply chain situation is unique, an understanding of the theories and techniques of logistics management provide a framework with which to systematically approach the analysis of supply chain problems.

Some discussions deal with the full scope of an organization's supply chain from raw material supplies through to delivery of a finished product to the end user; while others deal with just one part of the supply chain such as retailing or manufacturing; or just one logistics activity such as transport or inventory management. Analysis of each situation dealing with particular functions will usually require knowledge of specific techniques and may require detailed operational analysis; nevertheless it is always advisable to set the specific logistics problem in the context of the overall supply chain system and consider the effects of changes in one function on other functions both up and down the supply chain.

##### **Defining logistics and supply chain management**

There are many definitions' of logistics coined by authors, consultants and practitioners. However, for the purposes of this book the definition of logistics developed by the US Council of Logistics Management in 1986 will suffice:

The process of planning, implementing and controlling the efficient, cost-effective flow and storage of raw materials, in-process inventory, finished goods and related information from point-of-origin to point of final consumption for the purpose of conforming to customer requirements.

This definition highlights the key features of logistics:

- it is concerned with movement and storage of materials
- it is concerned with managing the information flows that underpin the flow of materials
- its scope ranges across the whole supply chain from point of origin of raw materials to final consumption of finished products
- it requires a single logic to plan and organize this flow of materials throughout the supply chain
- it has two key objectives:
  - (i) achieving appropriate customer-service standards and
  - (ii) doing so in a cost-effective manner.

Logistics management and supply chain management are essentially synonymous terms, in that logistics management is a systematic and holistic approach to managing the flow of materials and information across the whole supply chain from raw materials sources to end-user consumption.

Many logistics problems initially manifest themselves within the confines of an individual firm and indeed within an individual functional area of the firm. For example, a company may realize that it has insufficient warehouse capacity or that there is insufficient flexibility in production, or that inventory levels are too high. Yet the real cause of the

problem and indeed the solution may lie outside the immediate functional area or even outside the firm.

Approaching such problems from a logistics perspective therefore requires the student to consider the issue at three levels:

- Level 1      the specific function in which the problem occurs, e.g. the warehouse
- Level 2      the other functions within the firm which relate to the flow of materials or information, e.g. purchasing, manufacturing, marketing
- Level 3      the wider supply chain beyond the bounds of the firm, e.g. suppliers, distribution channel members, end users.

To analyse a problem only at level 1 would be a functional approach and not a logistics approach. Some authors argue that level 2 is a logistics management approach, while level 3 is a supply chain management approach. It is suggested here that a logistics approach requires consideration of all three levels, even though in practice it may not be easy to implement changes beyond the bounds of the functional area in which the problem occurs and even more difficult to effect change beyond the bounds of the firm.

### **Logistics objectives**

Improved customer service and reduced supply chain costs are the outputs of logistics management and it is through the achievement of these two objectives that logistics contributes to corporate performance. When analysing any logistics problem it is important to always keep these two fundamental objectives in view.

### **Customer service**

In many industries in the 1990s customer service has become a key competitive issue and there has been an increasing realization that efficient management of the flow of materials through the supply chain is critical to achieving high levels of service. In the 1960s and 1970s authors such as Peter Drucker talked of distribution being the neglected area of marketing or the 'economy's dark continent'. The 1980s and 1990s have seen companies attacking not just distribution, but the wider concept of logistics and realizing that improvements in logistics can improve service and reduce costs and thereby give the firm a significant competitive advantage which can then be exploited as a key element of marketing strategy. Indeed it is through customer service that the marketing and logistics functions interface.

### **Logistics costs**

The second objective of logistics is to minimize cost. Logistics costs frequently represent a significant element of a firm's total cost. In companies where logistics has not been well managed there is usually considerable scope for cost saving and there may well be a temptation for management to concentrate on the cost reduction objective to the detriment of customer service performance. However, it is critical that the required customer service standards are clearly defined and safeguarded before cost reduction measures are implemented.

It is usually the case that measures aimed at cost reduction result in more easily quantifiable benefits particularly in the short run, whilst measures aimed at service improvement tend to have less easily quantified and longer run outcomes such as enhanced customer satisfaction and greater customer loyalty which eventually work through to increased profits.

The starting point for any logistics project should therefore be a clear definition of the customer service standards required to give a competitive advantage. Once those standards have been defined the logistics manager should devise the most cost-effective systems to achieve the service targets.

### **Supply chain structures**

At first sight supply chain systems often appear to be quite complex involving many functions within a firm and many organizations along the supply chain. The complexity may be increased by confusion within organizations over responsibilities for logistical activities and an uncoordinated approach to the management of material and information flows.

The schematic diagram in Figure 2 provides a framework with which to approach the analysis of supply chains.

The figure shows there are three major issues which need to be considered when analysing supply chain problems:

- the physical flow of goods
- the information and financial flows and systems which underpin the flow of goods
- the organizational and management structures which control the supply chain.

Whether a situation relates to the whole supply chain or to only part of it, it is advisable to consider each of these three aspects.

### **The physical flow of goods**

The flow of goods through the logistics pipeline is the most obvious aspect of supply chain activity. A good starting point in analysing most cases is to produce a schematic diagram showing the flow of goods from point of origin of raw materials or components, through manufacturing and out through the distribution channels to the end-user.

(a) **Fixed points in the chain.** The first step is to categorize the various functional stages

in the supply chain, e.g. manufacturing, storage wholesaling, retailing, etc. and then group organizations into the following categories.

- The primary manufacturer - this is defined as the organization producing the final product.
- The primary manufacturer – this is defined as the organization producing the final product as used by the end-user (sometimes referred to as the original equipment manufacturer or OEM). In many supply chains the primary manufacturer is the pivotal point of the chain.
- Upstream of the primary manufacturer there are likely to be component suppliers and beyond them raw material suppliers. It may be beneficial to identify first -, second- and even third-tier suppliers to the OEM. There may also be consolidation centres between the component suppliers and the manufacturer to accumulate or sort supplies inbound to the manufacturing process.
- Downstream of the manufacturer are likely to be a variety of fixed facilities in the distribution channel. It is useful to think of distribution as all activities that take place after the OEM finished product leaves the end of the factory production line.  
Initially there may well be the manufacturer's finished product storage facilities, perhaps a warehouse at the factory site or distribution centres in 'field' locations closer to the market place. Thereafter the product is likely to move through distribution channels, be these wholesalers and retailers (common for consumer goods) or distributors (common for industrial goods).

It is advisable always to chart the supply chain as far as the end-user, because it is possible that difficulties for the final customer may arise between the last organization in the chain and the actual consumption or use of the product. For example, a medical equipment manufacturer selling products through distributors into hospitals may consider that the supply chain ends when the product is received by the hospital's purchasing or



stores function. In fact considerable problems in terms of inventory levels and product movement may arise between the hospital stores and the use of the equipment by the end-user, be that a surgeon or nurse. Increasingly companies are looking at influencing the total supply chain even within the customers' organization in order to ensure best customer service to the actual end-user.

**(b) Movement patterns along the chain.**

After identification and categorization of the organizations which comprise the fixed elements of the supply chain, the second step is to chart the flows and movements which provide the links between the fixed elements.

Conceptually transport should be the last issue to consider when analysing existing supply chains and indeed when planning new supply chains, because transport requirements are determined by the number and geographical proximity of the fixed elements in the chain and the volumes to be moved. When considering the links it is important to view the chain as a whole. Transport flows should be clearly indicated on the schematic diagram and in reality they may be more complex than simple direct flows between the fixed facilities.

It is often beneficial when analysing transport movements to additionally produce a simple geographical map to show the main fixed locations in the supply chain and the major movement patterns between them. A knowledge of the basic geography of an area is essential in analysing transport systems. For example, some potential transport options may be precluded because of physical barriers such as unbridged river estuaries or mountain ranges. Furthermore, mapping the locations of *all* fixed elements in the supply chain from raw material suppliers, through factories, wholesalers and retailers may reveal geographical juxtapositions that suggest opportunities for co-ordination of transport across the chain. For example, backloading outbound delivery vehicles with inbound component supplies. (A series of maps are contained at the end of this book as a starting point for geographical analysis.)

It is also important when considering transport to identify transport requirements right up to the end-user's point of consumption, as again problems and potential customer difficulty may occur beyond the point of final purchase. For example, in the UK, retailers selling 'flatpack' or 'knockdown' furniture recognized that some customers faced difficulty in transporting such furniture home from the store and consequently developed a service for the loan of car roof-racks or trailers to enable customers to conveniently complete the last leg of the supply chain.

Most supply chains have not been planned as a single system; rather they have evolved on the basis of many decisions taken independently at different times and different points in the chain. As a result chains are often complex and inefficient. The schematic mapping of the system is an essential first step in untangling this complexity and the production of a flow diagram is often a very good indicator of some of the major supply chain problems.

**Information management**

The second major group of issues to consider when analysing logistics cases are those related to information management.

Information management is critical to effective supply chain operations. In Figure 2 four key issues related to information management are identified.

**(a) Order processing information.** The first thing to consider is the operational systems

required to process orders through the supply chain. Customer demand triggers orders and the systems which are in place to capture the order and progress it down the supply chain must be identified. The order moves in the opposite direction to and initiates the physical flow of goods.

A second flow of information accompanies the movement of the physical product through the system, for example, despatch notes, delivery notes and invoices. Again this must be identified and its efficiency analysed.

Just as the physical flow of goods can be mapped, it is also useful to produce a schematic diagram to show the flows of information. This should indicate the fixed points through which the information passes, e.g. sales department, warehouse, transport department, and the mechanisms by which information is transmitted, e.g. telephone, fax, electronic data interchange (EDI).

Again the production of flow diagrams is an essential first step in understanding the mechanisms of the supply chain information flows and in highlighting potential problems.

- (b) **Demand forecasting information.** The second key aspect of information management in logistics is the information required for demand forecasting. A fundamental starting point for modern logistics management is the requirement for forecasts of future demand in order to plan the capacities of the supply chain functions such as production or transport and to determine the levels and locations of inventory required to meet customer demand.

In many organizations demand forecasting is the responsibility of the marketing or sales department, in others it is the responsibility of production, while in some it effectively does not take place at all. Accurate demand forecasts are essential to successful logistics planning and it is therefore important to identify the functions and system involved in demand forecasts and assess the accuracy of these forecasts.

- (c) **Management information.** The third aspect of information management relates to the availability of the management information which is necessary to monitor the efficiency of logistics operations.

A great variety of such information is required ranging from data to monitor the performance of specific operations, e.g. vehicle utilization levels or warehouse productivity to information which indicates the performance of the overall logistics system such as inventory levels throughout the supply chain.

In many companies there is a paucity of management information for logistics, partly because logistics is often a new function and no-one has previously collected relevant information and partly because most information is generated by and for the financial functions of the firm and may not be in an appropriate form for logistics managers. An important early step in logistics improvement is to clearly define the management information required to monitor the performance of supply chain activities and to establish if or how that information can be made available.

- (d) **Computer systems.** The fourth aspect of information management which requires analysis is the physical systems to facilitate the flows of operational information and provide the requisite management information. In most modern organizations this will centre around the computer systems and requires assessment of the capabilities of both hardware and software and increasingly of the network linkages between computers.

It should not be forgotten however that in some organizations and some situations, e.g. less-developed countries, computers may not be in evidence and indeed may not be appropriate; in which case analysis should be made of the alternative systems which are in place to handle information.

### ***The organization and management structures which control the supply chain***

The third major consideration when analysing logistics systems relates to the organizational structures which control the supply chain.

The essence of logistics is to develop an integrated approach to the management of the whole supply chain. It is therefore necessary to understand the pre-existing structures, functions and attitudes which control the existing supply chain system.

Analysis of management structures should be carried out at two levels:

- the individual firm, and
- the supply chain as a whole.

Even within the individual companies that comprise the supply chain, e.g. a manufacturer or a retailer, it is common to find responsibility for different logistics activities split between functions. For example, in-bound transportation, warehousing of components and inter-plant transportation might be the responsibility of the production function; warehousing of finished products and outbound transportation the responsibility of the distribution function; while customer service and inventory levels could be controlled by sales or marketing.

The traditional organizational structure of most companies is into vertical functional groups, while materials and information flow horizontally across these functions. It is important to identify the groups involved in the flows and to determine their perspectives and objectives in relation to logistics activity.

It is also important to assess the perspective of a company's senior management to supply chain activities and improvement. Various studies have shown that senior management understanding of, and backing for, logistics change is an essential ingredient for success. It is therefore necessary to assess the senior management's view of logistics as this will be critical to the likely success of future plans.

The relationships of the various individual organizations which make up the supply chain must also be examined. Most supply chains are comprised of a large number of companies, e.g. numerous component suppliers, numerous retailers or wholesalers. All these companies are independent commercial entities, each with their own business objectives and profit goals. As a result, the control of many supply chains has traditionally been fragmented between these companies and relationships were often adversarial.

In some instances one firm (often a major manufacturer) may have gained control of other organizations either upstream (e.g. component suppliers) or downstream (e.g. retailers) in a process of vertical integration in order to gain control of a greater part of the supply chain and thereby permit more systematic management of the system. This has been the case with some Japanese car manufacturers who often own component suppliers, and even have interests in the steel works supplying the raw material, as well as having control of the dealerships which distribute finished products.

In recent times there have been initiatives in many industries towards the formation of 'partnerships' between supply chain members. A prime purpose of this is to move towards a situation where logistics improvements can be implemented along the supply chain as well as within individual organizations.

A further important issue which should be examined when analysing the control of the supply chain is that of power relationships between the organizations and groups making up the chain. It is important to assess which organizations are most powerful, as in reality it is likely that only the most powerful members of the chain will be able to force through logistical initiatives which require significant changes of operational practice across the chain and may result in a disproportionate sharing of benefits. For example, it is unlikely that a small scale supplier of components will be able to initiate logistics changes which require significant changes in practice from a large manufacturer customer. Alternatively very significant logistics improvements have been made in UK food supply chains, forced through by a small number of very powerful supermarket groups which have been able to impose their wishes on food manufacturers and agricultural producers.

A final, but very important, point to bear in mind in relation to organizational issues is where supply chains are international or companies are multinational. There is a need for considerable cultural sensitivity and diplomacy when dealing with supply chain partners that are based in different parts of the world and that may have very different perspectives on business practices and on logistics management initiatives.

### ***Supply chain performance***

In order to study the benefits of any logistics improvements which may later be suggested and to help in determining where to target effort, it is necessary to assess the current performance of the supply chain.

This should be done at three levels:

- the overall performance of the supply chain
- the relative performance of the supply chain
- the performance of individual logistics functions.

### ***Overall performance***

It is necessary to evaluate and quantify the existing performance of the current logistics system in terms of both customer service and total logistics costs. This will then provide a benchmark against which to evaluate the success of any proposed changes.

- (a) **Customer service.** It is first necessary to identify or develop a set of key customer service performance criteria and obtain measures of the standards actually achieved by the company or the function.

In analysing customer service performance it is necessary to clearly differentiate the various levels of customer. Many firms consider their customer to be the organization which pays their invoice, for example a manufacturer's customer might be a wholesaler; a wholesaler's customer a retailer. Although these are customers and their service requirements must be met, from a supply chain perspective it is always advisable to identify the end-user, i.e. final consumer of the product, and consider their service needs; it is after all the payment from the end-user that actually provides the funds to make the payments all the way along the chain.

Another level of customer which might also be considered is the internal customer; that is the next group or function within anyone organization to receive the material or information flow. For example the production department may pass the finished product to the factory warehouse, the factory warehouse passes it to the transport department and transport passes it to the regional distribution centre. The service requirements of each one of these internal customers should be identified and the performance between the functions quantified.

- (b) **Logistics costs.** It is also desirable, although frequently not at all easy, to collate figures to indicate total logistics costs. Effort should be made to obtain at least a best estimate of total logistics costs because it is likely that initiatives introduced later into anyone area of the system may give cost benefits in that area but have trade-offs with cost dis-benefits in other parts of the supply chain. Unless the overall cost picture is known at the outset, it is impossible to accurately identify such trade-offs and determine whether individual initiatives are of overall benefit.

Where detailed figures on particular elements of logistics costs are not available within the company, it may be appropriate to use standard published figures, such as those produced by the UK Institute of Logistics, as a best estimate.

### ***Relative performance***

A further aspect of analysing the current situation of a company's supply chain is to benchmark its performance against outside organizations. Benchmarking has become increasingly popular in recent years and can include many aspects of supply chain activity such as

- customer service performance
- logistics costs
- systems and technology for operational functions, e.g. warehouse control, transport routing and scheduling, production management
- inventory levels.

The aim of benchmarking is to assess the company's performance in relation to best practice. Benchmarking can be accomplished in many ways including direct studies of other firms, possibly on a reciprocal basis with non-competing companies, use of studies published in trade or academic literature, attendance at conferences and trade shows. Although it is often difficult to directly obtain information about a competitor's supply chain performance, the logistics manager must ultimately make some judgment as to the firm's performance relative to the competition. The aim of supply chain management is to gain an advantage in terms of customer service and cost over competitors. It is therefore important to form as clear a view as possible of the firm's position in these issues relative to the main competitors.

### ***Performance of individual logistics functions***

So far the suggested approach to logistics analysis has concentrated on the supply chain at a macro-level in terms of the flows of materials and information, control structures and performance. Such an overview is an essential prerequisite of the logistics approach, which by definition deals with the supply chain as an integrated whole rather than with individual functions in isolation. However, alongside this macro-level analysis in most cases it will be necessary to undertake detailed analysis of one or more individual functions within the supply chain. For example, it may be necessary to analyse inventory control systems, transport operations, supplier relationships or production control systems. For any individual functions it is necessary to develop a clear picture of what is happening. Here again the three major features highlighted in Figure 1, the physical flow of goods, the underlying management information systems and the organizational control structures provide a suitable framework with which to approach the situation analysis. Clearly, however, within each function there will be many specific issues that need to be considered, which will require the use of the particular tools and techniques relevant to the specific function. For example, in analysing an inventory issue it may be appropriate to use the technique of Pareto analysis or the concept of stockturn ratio; whilst in analysing a transport problem it may be necessary to evaluate the use of vehicle carrying capacities or fleet operating costs.

## **Logistics in the business context**

### ***Internal corporate policies***

So far the situational analysis has been concerned with the nature and performance of the supply chain itself. It is also necessary to evaluate the corporate context in which the logistics functions operate. A brief assessment should be made of both the corporate business strategy and the marketing strategy with particular reference to those issues which directly affect or could be affected by logistical activities. For example, if the corporate plan states the need to reduce costs in order to become more price competitive, this may focus logistics planning on cost reduction initiatives. Alternatively the marketing plan may highlight the need to improve customer service as a key competitive element. If logistics is to contribute to corporate performance and competitive strategy, logistics managers must have a clear picture of corporate goals.

### ***The external business environment***

The final aspect of the situational analysis is to consider factors in the company's external business environment which may impinge directly on supply chain issues. Potentially there are many such influences, a few examples are given below.

- Increasing power of a major customer may force the company to introduce supply chain initiatives to meet that customer's inventory and delivery requirements.
- Increasing price competition from lower cost overseas producers may require initiatives in the supply chain to both reduce cost and improve service in order to remain

- competitive.
- Changes in the cost and/or efficiency of external service providers such as contract distribution companies or transport modes may impact on logistics policy.
- Development of new politico-economic regions such as the single European market may create opportunities for different logistics approaches.

The business environment is external to the company and as such is largely uncontrollable by the firm. The requirement is for the firm to continually scan the environment and identify changes, be they opportunities or threats, that might influence supply chain policy. The aim is to develop policies in response to, or preferably in anticipation of, changes in the environment.

### ***To SWOT or not? A note on SWOT analysis***

SWOT analysis (Strengths-Weaknesses-Opportunities-Threats) is a common technique used as the basis for situational analysis in marketing and business strategy studies. It can also be useful for categorizing issues in the situational analysis of logistics cases. However, experience shows that there is a danger if SWOT analysis is used that some students, particularly those who have studied marketing, may stray into a marketing analysis of the situation rather than a logistics analysis. In so doing too much emphasis may be given to aspects of the wider marketing policy such as price/promotion/product issues to the detriment of logistics analysis.

In the context of a logistics analysis, strengths and weaknesses will be concerned with controllable elements of the supply chain operations such as inventory, transport or order processing systems. Opportunities and threats will require identification of externalities which either directly affect or can be affected by supply chain policies.

**A word of warning therefore:** if SWOT analysis is used in logistics cases, ensure it is relevant to a logistics analysis rather than a marketing analysis.

## **Step 2. Identification of major issues and problems**

### ***Identify***

Identification of the main issues and problems is usually not only the most difficult but also the most crucial part of case analysis. Consequently, considerable thought should be given to the process. If the main issues and problems are not correctly identified, it is highly unlikely that appropriate recommendations can be made. The more comprehensive and rigorous the situational analysis, the more likely it is that the key problems and issues will emerge.

This section should not just concentrate on problems even though in many cases these will be paramount, but should also identify relevant issues, some of which may be opportunities rather than problems. For example, if a major customer introduces a new EOI ordering system, this may create an opportunity to improve the speed and accuracy of order intake and also reduce the costs of order processing.

### **Categorize**

The first step is to list all problems and issues that have been identified. The second step is to categorize the issues raised. There are various ways that this can be approached including:

- (a) problems that must be solved                      vs                      opportunities that could be seized
- (b) strategic issues    vs                      operational issues
- (c) Figure 1 gives an alternative framework for classifying issues and problems in relation to the various functional and organizational aspects of the supply chain.

Whatever basis is used, categorization of problems into meaningful related groups is an important step in moving towards sensible solutions.

Symptoms vs causes. It is very important to differentiate between symptoms and causes. In cases, as indeed in reality, it is often the symptoms that are most overtly stated. For

example, a manager may identify lack of warehouse capacity as a problem. In fact this might only be a symptom either of poor inventory management or of production policies which generate stock in excess of demand. The analysis must try to identify the real underlying problem and it is often the case that the problem lies in another part of the supply chain from the symptom, which is why a logistics approach, rather than a traditional functional approach, can be so beneficial.

#### Prioritize

The final step is to prioritize the problems and issues, perhaps identifying one or more major problems and then a number of minor issues. Alternatively problems can be split into those requiring immediate action and those which require longer term solutions. Whichever way problems are categorized and prioritized it is important to define the issues in a way that calls for action-oriented solutions.

### **Step 3. Generation and evaluation of alternative solutions**

Once the problems have been identified there follows the creative process of generating ideas and possible solutions.

#### Generating options

As many different ideas as possible should be developed, each with quite different approaches to the problem. It is particularly beneficial to undertake the ideas generation process in 'brainstorming' groups, as it is usually the case that such discussions have a synergistic effect and result in more and different solutions than anyone person might develop.

In generating solutions it is often helpful to think at three levels:

- the specific functional issue, e.g. purchasing, inventory, transport, etc..
- the corporate context , e.g. the requirement to achieve cross-functional changes within one company, such as between the marketing, production and distribution departments
- the supply chain context, e.g. possible changes within and between other organizations in the supply chain such as relationships with suppliers, or requirements for distributors to adopt different procedures.

A further helpful tool is the supply chain diagram shown in Figure I, which not only provides a framework for situational analysis but also provides a checklist of issues to consider when generating solutions.

The generation of solutions is in practice closely linked to the situational analysis, in that a good situational analysis should lead to a clear identification of the main issues and problems, which itself often points to appropriate solutions or courses of action.

#### Evaluating options

Cursory consideration of possible solutions will usually sift out the impractical or illogical suggestions. The aim should be to produce two or three realistic alternative solutions, each of which should be briefly described and evaluated in terms of the operational requirements, costs, benefits, etc.

One of the most important possibly the most important, aspects of evaluating alternatives is the need to make a realistic assessment of the practicalities of implementing the proposal and the likelihood of the option being adopted by the organizations concerned.

Traditional business planning adopts the following sequential approach:

- generate options
- select the preferred option
- consider how implementation can be achieved.

In practice, however, many theoretically ideal or optimum solutions, which may have great benefits for companies, never progress beyond the drawing board because the planners did not consider the realities of implementation at the planning stage. There is a strong argument that identification of the obstacles to and mechanisms for implementation should be identified and overtly stated at the point at which ideas are generated. Implementation then become a key element in the process of screening and selecting alternatives.

A further aspect of implementation is the need to 'sell ideas to stake holders in the company or wider supply chain. This is an issue which is especially relevant with logistics proposals, as almost by definition, a logistics solution will require an approach that crosses traditional functional boundaries and demand that people adopt different practices, targets or perspectives than they have been used to. Such changes are inevitably difficult to achieve. It is therefore advisable to think clearly at an early stage about how proposals can be packaged and presented to stake holders in order to gain co-operation. The mechanism for 'selling' the proposal should be a major consideration in the option screening process.

#### **Step 4. Recommended solution and justification**

The evaluation of alternatives in Step 3 should lead to a decision on the preferred course of action. A full description of the chosen solution should be given together with a justification of its choice in terms of expected costs and benefits.

With all the cases in this book a decision should be reached or a firm recommendation given. It is unacceptable to claim that there is insufficient information in the case to reach a decision or propose a solution. The cases generally contain most of the information that was available to the decision-makers in the situations described. Where it is felt that data or detail are lacking it must be remembered that, in reality, most decisions in business are made on the basis of imperfect or incomplete information.

#### **Step 5. Implementation**

The final aspect of case analysis is to carefully consider the implementation of the recommended solution. A list of practical implementation questions should be addressed such as:

##### *Resources*

- Who will be responsible for implementation?
- How can the benefits of the proposals be 'sold' to concerned individuals, groups, departments, both within the organization and within the wider supply chain?
- What will be the cost of the implementation process?

##### *Timing*

- What time scale is required?
- In what sequence will implementation occur?

##### *Monitoring*

- How will the costs and benefits be measured and monitored?

In practice evaluation of the realities, difficulties and costs of implementation should have formed an important part of any evaluation.



## **Appendix C**

### **Marking Guide for Group Written Work**

**1. Header page**

**2. Executive summary (10%)**

This should normally be no more than one page (approximately 300 words) in length.

It should indicate the

- main /issues

Note: the executive summary is a critical section of a business report, as it might be the only section read by the key decision makers. Great care should be taken in writing the executive summary in order to ensure only the most relevant points are included and that they are presented as clearly and concisely as possible.

**3. Contents page**

**4. The main body of the report**

This should contain:

**A brief literature review (15%)**

This must be comprehensive and can be summarised in a table which should be put in an Appendix.

The key aspects of the situation should be presented from a logistics perspective.

A schematic supply chain diagram may be a useful and concise way to illustrate the current situation. Include this in an appendix if you decide to use one. A table of previous papers or journal articles showing year, author/s and a three line summary of their approach might be a very efficient way to summarise your literature review.

**Outline of strategies (35%)**

Various alternative strategies may be briefly presented together with a brief statement of their pros and cons. Emphasis should be placed on this and the following section.

**Analysis (30%)**

A clear and concise statement should be given of the preferred solution or recommended policy together with a justification of its choice. Emphasis should be placed on this section.

**Conclusion (10%)**

By way of conclusion your report should be summed up concisely and include recommendations for further research.

## Appendix D

### Peer Review Form

Subject and code. ....

Lecturer-in-charge: .....

Group: \_\_\_\_\_

**Evaluate the group member's performance with respect to quantity and quality of work.  
Rate the performance by circling the most appropriate descriptive comment as a guide.**

<b>1. Knowledge</b>	Poor	Marginal	Meets requirements	Superior	Outstanding
<b>2. Dependability</b>	Absent from group meetings often	Occasionally late	Good	Rarely late or absent	Never late or absent
<b>3. Team spirit</b>	Unfriendly & discourteous	Occasionally unwilling to follow guidelines set down by group	Courteous	Always courteous	Very team spirited
<b>4. Task Initiative</b>	Negligible	Learns slowly	Participates in task development	Contributes to task development	Leads task development

**5. Comments** \_\_\_\_\_  
\_\_\_\_\_

<b>6. Overall Evaluation</b>	Low quantity and quality	Marginal input	Meets group goals and expectations	Performs above established group goals and expectations
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Signature.....Date.....

## Appendix E

### Marking Criteria – Individual Research Report

Course and code: .....

Lecturer-in-charge: .....

Student name: \_\_\_\_\_

	Very High	High	Mod.	Low	Very Low
<b>1. Relevance 20%</b>					
Topic is clear and relevant throughout	5	4	3	2	1
There is an appropriate, explicitly identified central theme	5	4	3	2	1
Evidence of careful thought about the theme	5	4	3	2	1
Key sub-themes are identified	5	4	3	2	1
<b>2. Organisation 10%</b>					
Clear statement of theme, aims and conclusion	5	4	3	2	1
Referencing system is consistent & appropriate	5	4	3	2	1
<b>3. Research 55%</b>					
Evidence of adequate survey/research	5	4	3	2	1
Relevant concepts are well researched	10	8	6	4	2
Arguments and assertions are supported by evidences/references	5	4	3	2	1
Evidence of understanding of the area	10	8	6	4	2
Application of research	10	8	6	4	2
Sub-themes are critically and logically analysed	10	8	6	4	2
There is logic and coherent argument	5	4	3	2	1
<b>4. Innovation 15%</b>					
Creative synthesis of themes	5	4	3	2	1
Creative argument employed	10	8	6	4	2

**TOTAL MARK** \_\_\_\_\_ %

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